

Title (en)
ANTI-TRACKING SPEAR-POINTS FOR EARTH-BORING DRILL BITS

Title (de)
KRIECHSTROMFESTE SPEERSPITZEN FÜR ERDBOHRMEISSEL

Title (fr)
POINTES EN ÉTOILE ANTI-RETOMBÉES POUR TRÉPANS DE FORAGE

Publication
EP 2462305 A2 20120613 (EN)

Application
EP 10744789 A 20100806

Priority

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Abstract (en)
[origin: US2011031021A1] Described herein are roller cone drill bits and modified roller cones for use in drilling subterranean earth formations, and more specifically roller cone drill bits and roller cones having optimized spear point designs and blade orientations on at least one of the roller cones for reduced tracking and/or increased drilling performance during bit use. The roller cone drill bits include a bit body with a longitudinal axis, one or more bit legs depending from the body, and at least one roller cone attached to each of the bit legs and able to rotate with respect to the bit body, wherein at least one of the roller cones includes a spear point at the cone apex having two or more cutting blades, the cutting blades being oriented at a variety of non-equal, asymmetric angles about a central cone axis with respect to each other, such that tracking during drilling using the drill bit is minimized or eliminated.

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Citation (search report)
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